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| Suite 300  |             |                      | LEWIS, RALPH A      |                 |
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#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte STEVEN S. LARSEN

Application 10/690,421 Technology Center 3700

Before MICHAEL W. O'NEILL, FRED A. SILVERBERG, and GAY ANN SPAHN, Administrative Patent Judges.

SPAHN, Administrative Patent Judge.

DECISION ON APPEAL

#### STATEMENT OF THE CASE

Steven S. Larsen (Appellant) seeks our review under 35 U.S.C. § 134 of the Examiner's rejection of claims 1-8 and 11-20. We have jurisdiction under 35 U.S.C. § 6(b).

<sup>&</sup>lt;sup>1</sup> Although the Examiner also rejected claims 9 and 10, Appellant is not appealing the rejection of those claims. *See* Corrected Sections for

#### The Invention

The claims on appeal relate to an endodontic instrument. Claim 1, reproduced below, with emphasis added, is illustrative of the subject matter on appeal.

An endodontic instrument, which comprises:

 a handle having an elongated base with a threaded blunt projection at a first end; and

a cap containing a channel extending through a first end of said cap with a first portion of the channel being threaded for mating with the projection of the elongated base of said handle, said cap possessing a side, and said cap also having a second end containing an aperture through which an endodontic file can project, the diameter of the aperture being selected to be larger than the diameter of the endodontic file but smaller than the diameter of a plastic cap attached to the endodontic file.

Independent claim 11 is similar to claim 1, but instead of a threaded blunt projection, only recites a threaded projection. Claim 11 also recites "a means for securely retaining a plastic cap of an endodontic file between the threaded projection of said handle and the second end of said cap." Br., Claims Appd'x.<sup>2</sup>

Independent claims 19 and 20 are similar to claim 1, but also recite that the cap and the base have substantially the same maximum

Appellant's Brief (37 C.F.R. § 41.37), filed Oct. 14. 2008. Thus, the Examiner's rejection of claims 9 and 10 constitutes the final agency action as to those claims since no further action on those claims is possible. In accordance with the Manual of Patent Examining Procedure (MPEP) § 1215.03, the Examiner should cancel claims 9 and 10 by Examiner's Amendment.

<sup>&</sup>lt;sup>2</sup> All references to "Br." herein, are to the Appeal Brief, filed Nov. 11, 2007.

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outer diameter and that the endodontic file has a tip and blunt plastic cap as well as other details of the file.

## The Rejections

The following Examiner's rejections are before us for review:

Claims 1, 2, 5, 6, 11, 12, 15, and 16 are rejected under 35 U.S.C.

§ 102(b) as anticipated by Powers (U.S. Patent No. 904,990, issued Nov. 24, 1908).

Claims 3, 4, 7, 8, 13, 14, and 17-20 are rejected under 35 U.S.C. § 103(a) as unpatentable over Powers and Lovaas (U.S. Patent No. 5,197,880, issued Mar. 30, 1993).

Claims 1, 2, 5, 6, 11, 12, 15, and 16 are rejected under 35 U.S.C. § 103(a) as unpatentable over Powers and either one of Mosley (U.S. Patent No. 1,115,718, issued Nov. 3, 1914) or Perry (U.S. Patent No. 656,300, issued Aug. 21, 1900).

#### SUMMARY OF DECISION

We AFFIRM.

#### OPINION

## Anticipation based on Powers

The Examiner finds that Powers anticipates independent claims 1 and 11. Ans. 3-4. In particular, the Examiner interprets Powers as disclosing claim 1's handle B having an elongated base with a threaded 11 blunt projection 12, 13 and claim 11's means for securely retaining a plastic cap of an endodontic file between the threaded projection of the handle and the

second end of the cap. *Id.* In response to Appellant's arguments that Powers' projection is pointed rather than blunt, the Examiner reasons that the term "blunt" is a relative term and "the illustrated rounded conical end of Powers reasonably meets the 'blunt' limitation." Ans. 6. Indeed, the Examiner determines that Powers' figures illustrate that the end of the terminal conical portion 13 is not sharpened and does not cut or pierce, but rather is wedged against the cap of the endodontic file as shown in Figure 3. Ans. 6-7.

Appellant contends that Powers has a pointed first end and a spherical cap on the file so that the angle of the file relative to the handle can be changed. Br. 5. Even though Powers states that the file can be securely retained when the cap is tightened, Appellant contends that Powers' handle has a pointed surface which, when tightened against the spherical surface of the cap, will not securely retain the file. Br. 6. Appellant disagrees with the Examiner's characterization of Powers as not forming a positively sharp point and ending in a small flat surface to be relatively blunt because, on page 1, lines 95-97, Powers states that "the forward end of the reduced portion 12 has a terminal conical portion 13." Consequently, Appellant contends that Powers cannot anticipate claims 1 and 11. *Id.* 

A claim under examination is given its broadest reasonable interpretation consistent with the underlying specification. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). In the absence of an express definition of a claim term in the specification or a clear disclaimer of scope, the claim term is interpreted as broadly as the ordinary usage of the term by one of ordinary skill in the art would permit. *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007). Where

the Specification does not assign or suggest a particular definition to a claim term, it is appropriate to consult a general dictionary definition of the term for guidance in determining the ordinary and customary meaning thereof as viewed by a person of ordinary skill in the art. See *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1348 (Fed. Cir. 2010) citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1322-23 (Fed. Cir. 2005).

Here, the Examiner finds that Powers' terminal conical portion 13 satisfies the claim language of "a threaded blunt projection." An ordinary and customary meaning of the adjective "blunt" is "having a thick edge or point: not sharp or keen." Powers' Figures 2 and 3 appear to show that at the left end of the terminal conical portion 13, there is a more tapered section that comes to a thick edge or point which is not sharp or keen. Thus, we agree with the Examiner that Powers' terminal conical portion 13 is blunt and we sustain the Examiner's rejection of claims 1, 2, 5, and 6 under 35 U.S.C. 8 102(b) as anticipated by Powers.

With respect to claim 11's limitation of "a means for securely retaining a plastic cap of an endodontic file between the threaded projection of said handle and the second end of the cap," we note that "the 'broadest reasonable interpretation' that an examiner may give means-plus-function language is that statutorily mandated in paragraph six." *In re Donaldson Co., Inc.*, 16 F.3d 1189, 1194-95 (Fed. Cir. 1994) (en banc). In other words, in order to meet a "means-

<sup>&</sup>lt;sup>3</sup> Webster's Third New International Dictionary, Unabridged, Copyright 1993, Merriam-Webster, Incorporated, accessed at http://lionreference.chadwyck.com/searchFulltext.do?id=3700478&idType=offset7divLevel=2& queryld=../session/1314219934\_4021&area=mwd&forward=refshelf&trail=refshelf (last viewed on Aug. 24. 2011).

plus-function" limitation, the prior art must (1) perform the identical function recited in the means limitation and (2) perform that function using the structure disclosed in the specification or an equivalent structure. *Cf. Carroll Touch Inc. v. Electro Mechanical Sys. Inc.*, 15 F.3d 1573, 1578 (Fed. Cir. 1994); *Valmont Indus. Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1042 (Fed. Cir. 1993); *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1580 (Fed. Cir. 1989).

Appellant states that the Specification defines claim 11's 
"means for securely retaining a plastic cap of an endodontic file 
between the threaded projection of said handle and the second end of 
the cap," in paragraph [0016], by the following sentence:

The cap 2 is then screwed closer to the first end 5 of the elongated base 3 until the plastic cap 12 is securely retained in the channel 6 between the second end 9 of the cap 2 and the projection 4, as a result of the blunt projection 4, as seen in FIG. 1, pushing against the blunt plastic cap, shown in FIG. 2

Br. 5-6.

Thus, the Specification defines the means as the blunt end of the threaded projection 4. Powers' terminal conical portion 13 meets claim 11's means plus function limitation because it (1) performs the identical function of securely retaining a cap of an endodontic file between the threaded projection of said handle and the second end of the cap; and (2) performs that function by using the blunt end of the elongated base, the blunt end being either a similar structure to the structure disclosed in the specification or an equivalent structure.

In view of the foregoing, we also sustain the Examiner's rejection of claims 11, 12, 15, and 16 under 35 U.S.C. § 102(b) as anticipated by Powers.

Obviousness based upon Powers and Lovaas

With respect to claims 3, 4, 13, 14, 19, and 20, the Examiner finds that Powers discloses the endodontic instrument being used with an endodontic file (c) substantially as claimed, except that Powers fails to explicitly disclose the plastic material of the file's cap. The Examiner concludes that the selection of common and widely used plastic as the material for the cap would have been obvious to one of ordinary skill in the art as a matter of routine in practicing the Powers' invention. The Examiner also finds that to have formed an aperture in the cap into which the file is inserted and secured would have been obvious to one of ordinary skill in the art as a routine common mechanical expedient. Ans. 5.

With respect to claims 7, 8, 18, and 20, the Examiner finds that while Powers fails to disclose that the file moves away from and then curves back toward a centerline which it eventually crosses, Lovaas discloses any endodontic file shaped with a bowed configuration that meets the claim language. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to use the bend endodontic file of Lovaas in combination with the endodontic instrument of Powers "in order that such files may be used on nonlinear root canals with a device that allows for ease in handling and angular adjustment of the file so that it may be used more readily and with more satisfactory results." *Id.* 

Appellant alleges that Appellant alone recognized the need to stabilize the needle of the endodontic file and that "invention may exist in the discovery of the cause of a defect in an existing machine or process and applying a remedy therefor even though, after the cause is understood, the remedy would be obvious." Br. 7.

Appellant contends that "by itself, Appellant's comprehension of the need to stabilize the needle demonstrates that claims 3, 4, 7, 8, 13, 14, 17, and 18 are patentable and not obvious over Powers in view of Lovaas." Br. 9.

We cannot agree with Appellant that claims 3, 4, 7, 8, 13, 14, 17, and 18 are patentable simply because Appellant recognized the need to stabilize the needle of an endodontic file and then applied a remedy to the problem. Here, Appellant has not set forth any analysis as to how the facts of the present case are similar to the facts in any of *Ex parte Phair, Ex parte Campbell*, and any of the other cases cited on page 8 of the Appeal Brief. Without knowing that the facts of the present case are similar enough to the facts of the cited cases, we cannot determine whether the holdings in the cited cases should be applied to the present case. In addition, Appellant has supplied no evidence, in the form of affidavits, declarations, etc., which supports the contention that Appellant was the only one who understood the problem and came up with a solution for that problem. Without any analysis as to the similarity of the facts of the present case and the cited cases and without any supporting evidence that Appellant alone discovered the

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<sup>&</sup>lt;sup>4</sup> Appellant cites to *Ex parte Phair*, 1 USPQ 133, 143 (Bd. App. 1929) and *Ex parte Campbell*, 211 USPQ 575 (Bd. App. 1980) for this proposition.

problem, we sustain the Examiner's rejection of claims 3, 4, 7, 8, 13, 14, and 17-20 under 35 U.S.C. § 103(a) as unpatentable over Powers and Lavaas.

Obviousness based upon Powers and either Mosley or Perry

In the alternative, the Examiner finds that if one of ordinary skill in the art would not find Powers' terminal conical portion 13 to be blunt, then Mosley and Perry each teach projections having blunt ends for holding dental instruments in a secure manner, while still allowing for angular adjustment in the same manner as Powers. Ans. 6. The Examiner concludes that it would have been obvious to a person of ordinary skill in the art to make the end of the terminal conical portion 13 of Powers be blunt as taught by either Mosley or Perry in order to provide for a secure hold of a dental instrument. *Id.* 

Appellant again alleges that "Appellant's comprehension of the need to stabilize the needle demonstrates that the claims . . . are patentable and not obvious." Br. 9. Appellant also alleges that neither Mosley nor Perry discloses a projection having a blunt end. Br. 9-10. More particularly, Appellant alleges that because the end of Mosley's hand piece contains grooves to mate with projections on the spherical member of the tool, the end of Mosley's hand piece is not blunt. Br. 10. Appellant also alleges that because the end of Perry's handle is concave, it is not blunt. *Id.* 

We disagree with Appellant that the claims are patentable because Appellant comprehended of the need to stabilize the needle for the same reasons as discussed *supra*. We also disagree with Appellant that the ends of Mosley's hand piece and Perry's handle do not satisfy the claim limitation of blunt. Both ends of Mosley's hand piece and Perry's handle have a thick edge or point and are not sharp or keen and thus, satisfy the ordinary and

customary meaning of the claim term blunt as discussed *supra*. Whether the end of Mosley's hand piece has grooves therein and the end of Perry's handle is concave does not have any bearing upon whether the ends are blunt. With respect to claim 11, Powers' terminal conical portion 13, as modified to be blunt by the teachings of either Mosley or Perry, meets the means-plus-function limitation because it (1) performs the identical function of securely retaining a cap of an endodontic file between the threaded projection of said handle and the second end of the cap; and (2) performs that function using the blunt end of the elongated base, the blunt end being either a similar structure to the structure disclosed in the specification or an equivalent structure.

In view of the foregoing, we sustain the Examiner's rejection of claims 1, 2, 5, 6, 11, 12, 15, and 16.

#### DECISION

We affirm the Examiner's rejection of: claims 1, 2, 5, 6, 11, 12, 15, and 16 under 35 U.S.C. § 102(b) as anticipated by Powers; claims 3, 4, 7, 8, 13, 14, and 17-20 under 35 U.S.C. § 103(a) as unpatentable over Powers and Lovaas; and claims 1, 2, 5, 6, 11, 12, 15, and 16 under 35 U.S.C. § 103(a) as unpatentable over Powers and either one of Mosley or Perry.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

### AFFIRMED

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